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ABSTRACT

The goal of this study was to describe student transportation programs in Georgia and to identify common areas of concern and common characteristics of these programs. The report summarizes the literature regarding transportation issues and the accumulated knowledge of experienced transportation managers. The study team met with the superintendents and transportation officials from a number of Middle Georgia School Systems. The survey was mailed to the Middle Georgia School Systems initially and then to the remaining 172 school systems throughout the state of Georgia. Forty-three percent of these systems responded. Focal points of the study were: (1) demographics; (2) management; (3) recruitment and compensation of drivers; (4) driver training; (5) rules and regulations; (6) student training; (7) student code of conduct; and (8) implications of staff development. Appended is a list of the duties and responsibilities of the transportation director. Included are 40 references. (SI)

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A SURVEY OF PUPIL TRANSPORTATION IN GEORGIA

Martha S. Carter

Priscilla Doster

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For Additional Copies, Contact:

Dr. C. Thomas Holmes
Editor, Monograph Series
Bureau of Educational Services
G-9 Aderhold Hall
College of Education
The University of Georgia
Athens, GA 30602
(404) 542-0913

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Chapter 1

Introduction

This report represents our understanding of the background and issues involved in providing effective transportation services to students in Georgia. The report focuses on the concerns expressed by Middle Georgia superintendents and other local school system transportation officials. The need for such a study was generally recognized by school administrators throughout Georgia. The goal of this study was to describe student transportation programs in Georgia and to identify common areas of concern and common characteristics of these programs. The data collected in this study could be used to produce a school transportation leadership development program. A primary concern of the study was reduction in the amount of time school administrators spend on transportation problems and reduction in the types, numbers, and frequencies of such problems. The report summarizes the literature regarding transportation issues and the accumulated knowledge of experienced transportation managers. The report has been enhanced by the cooperation and support of the Georgia Department of Education, local school officials, and other transportation personnel throughout the state.

Major Findings

1. The major finding of this project is that transportation programs operate in vastly different ways throughout the state but all experience similar problems and express similar concerns.

2. One common factor which seemed to reduce the number and severity of problems in transportation is the operation of a regularly scheduled, periodic driver in-service program.
3. Proper planning allows transportation personnel to utilize their time more effectively. Over-all goals should be clearly defined and agreed on. The methodology used to reach these goals should be agreed on. This cooperative effort is essential if mistakes due to lack of knowledge are to be avoided.
4. Alternatives should be included in planning and contingencies must be anticipated.
5. Job descriptions specifying the authority and transportation responsibilities of various personnel should be clearly defined and understood by all personnel.

Methods and Procedures

Detailed in this chapter is the technical approach to completing this study. A discussion of the essential elements addressed to effectively complete the study is given. The approaches for the various parts, phases and tasks performed are provided to demonstrate both the thoroughness of coverage and the order and interrelationships of events. The objectives of the study included three essential elements:

- Identification of pertinent issues
- Collection of relevant data
- Implications for a staff development training program

To gain an understanding of various background information and to identify pertinent issues, the study team met with the Superintendents and transportation officials from a number of Middle Georgia School Systems. From the issues of concerns identified by this group an instrument was developed to collect data relative to these same issues from school systems throughout Georgia. The survey was mailed to the Middle Georgia School Systems initially and then to the remaining 172 school systems throughout the State of Georgia. Commonality of transportation issues was one consideration in the analyses of data. These data were further analyzed to identify trends and to establish statewide priorities. The third element of the project included the implications for staff development training programs addressing these issues.

The separate components are portrayed below to indicate: a) the interrelatedness of the components, b) the time flow, and c) the simultaneous nature of the three parts leading to the preparation of this final report.

Study Tasks

A written narrative is provided for each task to add further clarification to the process involved for the completion of this study.

Phase A

This part of the study entailed identification of specific issues of concern relative to the operation of student transportation programs in selected Middle Georgia School Systems. Three specific tasks facilitated the identification of these issues.

Task 1. Discuss areas of concern regarding the transportation program in selected Middle Georgia School Systems.

In order to build an information base from which future study considerations could emerge effectively, the study team organized and conducted an information sharing seminar for superintendents and transportation personnel in selected Middle Georgia School Systems. Seminar participants identified areas of greatest concern relative to the operation of the transportation programs in their individual systems.

Task 2. Identify selected transportation issues.

Seminar participants studied the areas of concern as identified by the individual systems. Areas of commonality were recognized and specific issues to be considered were identified.

Task 3. Prioritize transportation issues.

Specific transportation issues were discussed in terms of the types of problems which occurred, the numbers and frequency of such problems, and the amount of time which must be allocated to deal with these problems. Identified transportation issues were prioritized to designate those issues responsible for the greatest drain on the systems resources. Effective strategies for dealing with these issues were shared by the participants.

Phase B

This part of the study required collection of relevant data concerning the frequency of occurrence and the relative seriousness of these issues as perceived by transportation officials throughout

Middle Georgia and the state. Three specific tasks facilitated data collection and analyses.

Task 4. Development of a data collection instrument

The project team studied the transportation issues as identified by the seminar participants. A data collection instrument was developed to address these issues.

Task 5. Survey systems in Middle Georgia and throughout the state.

The project team utilized the survey instrument to collect information from school systems in Middle Georgia and throughout the state. The survey was distributed to the superintendents or the designated transportation official in each system.

Task 6. Analyze transportation survey data.

Completed survey instruments were returned to the project management team of the Bureau of Educational Services at the University of Georgia for analyses of the data. Results were reported in terms of the types of transportation programs operating within the state and the types of problems dealt with by the transportation officials. These problems were analyzed in both quantitative and qualitative terms.

Phase C

This part of the study suggests implications for staff development training programs for transportation personnel. Activities were correlated with issues identified by transportation officials throughout Georgia. These activities are described in detail in Chapter 9 of this final report.

Task 7. Implications for staff development activities to match priority issues identified through the statewide survey.

Implications for staff development activities were identified and matched to priority issues as determined by results of the statewide survey. The activities address many facets of the school transportation program. These activities will be made available to all school systems in Georgia.

Chapter 2

Demographics

The project team utilized the survey instrument to collect information from school systems in Middle Georgia and throughout the state. The survey was distributed to the superintendents or the designated transportation official in each system. Completed survey instruments were returned to the project management team of the Bureau of Educational Services at the University of Georgia for analyses of the data. Surveys were mailed to the 186 school systems in Georgia. Forty-three per cent of these systems responded. In viewing the results of the data it may be more useful to look at the systems of comparable size.

The mean average daily attendance (ADA) for the respondent systems was 6716. The median ADA for respondent systems was 3500. Six systems with an ADA of 22,584 or higher responded to the durvey; only two systems with an ADA of less than 1000 responded. The majority of the respondents, 26.8%, represented systems whose ADA ranged from 1000 to 1999. Systems with an ADA of between 2000 and 2999 were represented by 13.4% of the respondent sample, as were systems with ADA of 3000 to 3999. Thus, 53.6% of the respondent sample was composed of systems ranging in size from an ADA of 1000 to 3999.

Survey responses indicate 18% of transported students are black and 81% are white. Twenty-three systems reported fewer than 25% black students; six systems reported fewer than 25% white

students. A total of 29 systems reported the percentage of minority students in the 40 to 60% range.

An average of 70% of pupils in the respondent systems are transported by system support. Thirty-three systems reported 90% or more of their students are transported by system supported means of transportation.

Bus Fleets

Four of the respondent systems reported bus fleets of 113, 132, 317, and 351 on regular routes. The school bus fleet ranges in size from 20 to 29 for 28% of the respondent sample and ranges from 30-39 buses for 18.3% of the respondent sample. Six systems reported a fleet of fewer than 10 buses on regular routes.

Seventy-two systems, or 87.8% of the respondent sample, reported operation of nine or fewer special education buses. The two largest respondent systems reported operation of more than 100 special education buses.

Seventy per cent of the respondent sample reported fewer than 10 spare buses. Only the seven largest systems reported maintaining 20 or more spare buses.

Bus Routes

The number of regular routes ranged from three to 900, with 33.8% of the systems having between 20 and 39 routes for regular education students. The majority of systems report combined routes for elementary and middle school students (80.9%), elementary and secondary students (86%), and middle and secondary school students (93%).

Fifty-two systems reported five or fewer special education routes. Three systems reported more than 100 routes designated for special education students.

The average number of stops reported per route was 27, with 34% of the respondents indicating routes averaging between 20 and 29 stops. Three systems reported routes averaging 50 or more stops and three systems report routes averaging less than 10 stops.

Average length for bus routes was 24.2 miles, with 48.1% of the respondent sample averaging 20 to 29 miles. The shortest route ranged less than ten miles for 46% of the systems and longer than

30 miles for seven per cent of the systems. The longest route averaged 30 to 39 miles for 34.7% of the respondent sample.

Time required for completion of a bus route averaged 64.3 minutes, with 38.6% of the respondent sample reporting route time lengths averaging 50 to 69 minutes. The shortest route averaged 40 to 49 minutes for 38.1% of the respondent systems and 20 to 39 minutes for an additional 46% of systems. Thirty-one systems reported time for the longest route as being 90 minutes or more.

Earliest garage departure time was reported as 6:45 a.m. for 40.5% of the respondent systems and 6:30 a.m. for an additional 30.4%. Two systems reported earliest departure time as 5:45 a.m.; one system reported 7:15 a.m. as the earliest garage departure time.

Latest school arrival times ranged from 7:20 a.m. (one system) to 9:15 a.m. (one system), with the majority of systems (45.7%) reporting average arrival time of 8:15 a.m.. Systems were not asked to indicate times for the opening of school or whether different grade levels of schools had differing opening times.

Latest arrival at home times ranged from 4:00 p.m. (five systems) to 5:10 p.m. (three systems), with one-third of the respondent systems reporting all students arriving at home by 4:30 p.m.

Chapter 3

Management

Careful management of a bus fleet requires many decisions related to bus operation, maintenance, and personnel. Fuel, labor for servicing and repairing, supplies, salaries, and supervisory cost are continuing expenses. Effective management of these costs require an overall management structure and organization and people equipped with the necessary knowledge and skills.

Transportation Director

Seventy-eight of the respondent systems (94%) have a specific person designated as transportation director. This is a full-time position in 61% of the respondent systems and a part-time position in the remaining 39%. In the majority of systems the transportation director's office is located in either the bus shop/garage (50%) or the central office (43%).

The transportation director reports directly to the superintendent in 8% of the respondent systems and to an assistant superintendent in 46% of the systems. The transportation director reports directly to the board of education in two of the respondent systems.

Route Schedules

Route scheduling is a major responsibility of most transportation directors. Seventy-seven per cent of systems responding to

the questionnaire had specified starting times for all routes; 63% designated ending times for routes.

Systems were asked to specify the maximum amount of boarding time at a stop. The mean maximum stop time was 1.8 minutes with the most frequent (37.5% of reporting systems) maximum stop time being one minute. Six systems (12.5% of the systems responding to this question) reported maximum stop-times of four, five, or seven minutes.

Maximum wait time at a stop averaged 1.75 minutes for the 46 systems responding to this question. Twenty systems reported a maximum wait-time of one minute and 16 systems reported a maximum wait-time of two minutes. Three systems wait a maximum of four or five minutes for students to get to the bus stop. Seventy-four systems (90% of those responding to the item) agree that weather conditions do affect the length of time the driver will wait for students to get to the bus stop.

Minimum distance between stops varied from 0.08 mile to 1.2 miles, with a mean minimum distance between stops of 0.16 miles for the 65 respondent samples. Maximum distance between stops ranged from 0.1 mile to 14 miles. The mean for the 34 responding systems was a maximum of 2.7 miles between stops. Three systems had maximum distances between stops of 11, 12, and 14 miles.

On-campus Supervision

On-campus supervision of the transportation program is the responsibility of the school principal (83%) or assistant principal (4%) in the majority of responding systems. In other systems the transportation director (6%), superintendent (4%), or regular classroom teacher assigned to bus duty (3%) is charged with the responsibility of on-campus transportation supervision.

The bus loading/unloading area is separate from the automobile loading area at schools in 74% of the respondent systems. Fifty, or 63% of the systems responding to this item, systems have written procedures for supervising student loading/unloading on campus. Written dismissal schedules are utilized in 83% of the responding systems.

When asked to identify the principal's role in discipline related to bus loading/unloading, four systems (5%) report the principal directly supervising these activities and 73 systems (95%) report

the principal delegating this responsibility to an assistant principal.

Who is Transported

Sixty-two of the 82 systems responding (75.6%) report that they will transport students who live less than 1.5 miles from school. Special requirements or restrictions governing transportation of students living less than 1.5 miles from school are found in 30 systems (42.3% of respondents). Twenty-one of these require special permission from the board or superintendent for the student to be transported less than 1.5 miles. Out-of-county students are transported by 31 of the responding systems; transportation is not provided for these students in 48 systems.

Public Relations

Systems were asked to identify the various ways parents were informed of changes in the system transportation program. The child served as the most frequent means of informing parents of

Table 1
Public Relations

	Method of Informing Parents					
Topic	Mail	Phone	Child	In-Person	News-Paper	Other
Rules/regs.	33	26	61	26	42	24
Schedule changes	27	33	64	27	27	15
Immediate problems	24	68	27	44	5	11

	Method of Informing Students		
Topic	Student Newspaper	Poster Contest	Other
Bus issues	21	23	49

N = 84

bus rules and regulations (61 systems) and of bus schedule changes (64 systems). Telephone calls are reported to be the most frequent means (68 systems) of informing parents of immediate problems with the transportation program. These data are presented in Table 1.

Other frequently used means of informing parents of transportation rules and regulations include the student handbook (10 systems), school bulletins (5 systems), and radio announcements (4 systems). School personnel (5 systems), written notes to parents (3 systems), and radio announcements (3 systems) are other methods used to inform parents of schedule changes. The most frequently used other methods of informing students about bus-related issues include the bus driver (9 systems), school announcements (7 systems), and classroom teacher (7 systems).

Assigned Seating

Seventy-seven per cent of the systems responding to the questionnaire reported that seats are assigned to students. The decision whether or not to assign seats is reported as being made by the driver in 65 systems and by other school personnel in 13 systems. Most frequently used methods of assigning seats are younger in front/older in back (24% of respondents); boys one side/girls other side (15%); back to front as bus loads (6%); back to front, one student per seat (3%); or a combination of all of the above methods.

Only 24 of the 82 responding systems check for student absenteeism. Seventy-three systems reported methods by which they guard against vandalism on the bus. Forty-four of these reported inspection by the driver at varying periods of frequency, seven systems specify rules to curb vandalism, and 22 systems reported varying means of preventing vandalism of school buses.

Aides on Buses

Aides are assigned to buses or regular routes in only two of the respondent systems, but are assigned to special education routes in 44 systems. The major responsibility of these aides is to assist students (37 systems) although some aides are reported to assist with student discipline. The reported hourly pay scale for transportation aides ranged from minimum wage to $6.20 per hour.

Security

Systems were asked to identify major transportation security problems. Theft (30 systems) and vandalism (29 systems) were identified most frequently. Eleven systems reported no transportation problems.

Communication with Drivers

Another major area of concern is communication with drivers on the route. Ten systems report two-way radios in every bus and an additional 15 systems have radios in some buses. Fifty-five systems reported no radio communication with drivers. The radio base station is monitored in 24 of the 25 systems reporting radios in buses.

Field Trip Procedures

Seventy-eight systems reported use of school buses for field trips. The bus is requested through the system central office in 52 of these systems; requests are made through the school in 23 systems. Central office personnel obtain the driver in 58 systems; school personnel select the field trip driver in 20 systems. Driver selection methods include driver volunteering, selection of drivers from approved lists, or rotation among regular drivers. Three systems limit the number of field trips per driver per year.

Driver base pay for field trips ranges from $4.25 per hour to $55.00 per day in the systems responding to the questionnaire. Only seven of the respondent systems provided extra insurance for drivers. Charges for extra gas, oil, etc. were reported by 35 systems. Sixteen systems reported no time restraints for field trips; 38 systems reported time restraints such that regular bus routes would not be affected by the field trip.

Evaluation of Drivers

Drivers are evaluated by the Transportation Director in 71% of the responding systems. Yearly evaluations are conducted in 80% of the responding systems and twice yearly evaluations in 4% of these systems. Drivers are also evaluated when there is question or concern regarding performance or when specific

problems occur. Some systems evaluate drivers quarterly, monthly, or periodically or on an unscheduled basis.

Bases for driver evaluation include performance (46 systems), cooperation (25), safety (19), discipline (14), parent or student complaint (10), driver absenteeism (6), scheduling (5), neatness (4), maintenance (3), observations (3), and accidents (3). Four other bases for evaluation were identified by fewer than three systems. Twelve systems did not respond to this item.

Driver "Perks"

Bus driver appreciation days are held in 55% of the respondent systems. In addition, 35% present safe-driver awards to drivers with safe driving records.

Various other attempts are made to help drivers feel part of the school system staff. Most frequently identified measures include annual appreciation banquets, dinners, or picnics (17 systems), participation in systemwide meetings (12), selection to teach driver training classes (7) availability of superintendent or transportation director for frequent consultation or daily contact (6), serving as speakers for student meetings or staff meetings (4), or memos/newsletters (3).

Other methods for improving driver sense of belonging include attendance incentives, driver awards, newspaper publicity, and a driver organization. A number of systems have principals as well as the superintendent attend beginning of the year meetings. Drivers may be asked to assist with route planning, critique current happenings in the system, and assist in systemwide advisory committees. In other systems drivers may have use of school lounge facilities, be included in school or systemwide social functions, and participate in all system employee benefit programs.

Chapter 4

Recruitment and Compensation of Drivers

The most important individual in the operation of school buses is the driver. Fuel consumption and bus repair can vary dramatically. Driving skills and habits play a significant role in the safety controls and the economical use of the bus. Careful screening and selection of bus drivers can reduce the cost of operation and increase the degree of efficiency with which a school transportation system can operate.

Recruitment

The 75 systems responding to this survey item reported utilization of their substitute pool as a means of recruiting drivers. Thirty-two of these 75 systems reported use of additional advertising for recruitment purposes.

Seventy-two systems, or 95% of the respondents, employ a screening process for recruiting drivers. Four of the systems responding do not screen prospective drivers. The most frequently used screening criteria include:

- Past employment
- Driving record
- Job performance as a substitute driver
- References.

Overall qualification requirements were the same for all responding systems. The state requires a prospective driver to be at least 18 years of age and not yet 65 years of age. He or she must pass a physical exam, be able to obtain a Class III license, have a good driving record for a period of seven year, and complete 18 hours of training.

Sixty-four of the systems reported no requirement for personal vehicle insurance, while 13 systems listed it as a requirement for employment.

Responses for minimum age required varied among the local systems. Thirty-three systems followed the state's requirement of 18 years of age, one system required 20 years of age, 35 systems required a minimum age of 21, three systems required a minimum of 22 years, and six systems required a minimum age of 25.

Of the 73 systems responding to the survey item concerning how to attract higher quality drivers, 42 systems reported better salaries, while 18 systems reported better salaries and benefits. Thirteen systems identified other suggestions such as removal of disruptive students, more community recognition, guarantee of minimum number of hours per day, to providing monitors to help drivers maintain control.

The average length of service by drivers in the 77 systems that responded to this item on the survey was 11.5 years. The mode and median were both 10 years of service. The reported range among the systems varied from three years to 25 years.

Compensation

Only 55 systems responded to the item on the survey regarding minimum salary. The mean salary for those systems responding was $4956. Fifty systems responded to the survey item regarding maximum annual salary. The mean here was $5998.

Systems were asked to designate whether or not they provided a local supplement for bus drivers. Of the 26 systems responding, 72 (95%) do provide a local supplement to bus drivers. Four systems (5) of those who responded do not provide a local supplement.

The question of whether or not drivers are paid for training time was addressed on the survey. Seventy-three systems responded to this item. Only 14 systems (20%) reported that they pay for training time. Fifty-nine systems (80%) reported they do not pay for driver training time.

Who pays substitute drivers? Eighty-one (99%) systems responded to this question. Eighty (99%) systems reported substitute drivers are paid by the local system. Only one system reported the substitute driver was paid by the individual driver.

Contracts/Benefits

In the area of benefits offered to drivers, the question was asked: How many systems offer contracts? Of the 82 systems responding to this item, 66 (80%) reported that they offered contracts. Sixteen systems (20%) reported that they do not offer contracts to drivers. When asked if statements of employment are offered to drivers, 40 systems (53%) of the 75 systems who responded to this question said yes. Thirty-five systems (47%) reported that they do not offer statements of employment to drivers. Local benefits offered to drivers varied. Forty-six systems provide health insurance as a benefit to drivers and 19 systems provide life insurance for their drivers.

Chapter 5

Driver Training

Of the 75 responding systems, 45 require the basic 18 hour training program as mandated by the Georgia Department of Education for all new school bus drivers. All but five of these 45 require the same basic training for substitute drivers. Nine of the 45 require the basic 18 hour program plus attendance at special workshops and safety meetings which are also required of veteran drivers.

The length of driver training for new drivers ranged from six to 48 hours. These hours included a classroom component, on-bus observation of a veteran driver, practice behind the wheel of an empty bus, and practice driving a regular route with the regular driver monitoring the training. Five systems require a driving test after completion of training. New drivers are on probation for six months in one system.

Training for veteran drivers includes such topics as driver safety; local system rules, policies, and regulations; first aid, cardio-pulmonary rescusitation; emergency evacuation; student management; and driver attitude. Many systems include training in preparation for participation in school bus road-e-os. Reported training for veteran drivers ranges from three to 30 hours.

Training for substitute drivers ranges from three to 40 hours and covers both state mandated areas as well as other topics presented to veteran drivers.

Driver training sessions may be conducted by the system's transportation supervisor, specially trained veteran drivers, the Georgia State Patrol, bus shop foremen, system or school level administrative personnel, or consultants from the Georgia Department of Education.

Administrator Participation in Training

Survey responses indicate that 52 systems (64%) of the 81 systems who responded to this survey item have "some" participation of central office administrators during training for bus drivers. Eleven systems (14%) reported involvement of central office administrators during "all" components of driver draining. Eighteen systems (22%) reported "no" participation of central office administrators during driver training.

Thirty-eight (48%) of the 79 systems responding said school administrators participated "some" in driver training. Three systems (4%) reported school administrators participated in "all" components of driver training. The remaining 38 (48%) systems of the 79 reporting stated their school administrators had "no" participation in the driver training program.

Driver Certification Requirements

Systems were asked whether or not they maintained the drivers Class III license on file. Seventy-eight (95%) reported all were on file. Three systems (4%) reported "some" were on file; while the one remaining system (12%) reported they have "no" Class III license on file.

Regarding pre-certification requirements, only 10 systems responded to this item on the survey. Five reported that they require 18 hours of driving. One system reported 10 hours as a requirement, one system reported 12 hours, another reported 45 hours for a pre-certification requirement.

There are no pre-certification requirements for bus drivers in 22 of the systems responding to this item. Seventeen systems require that the prospective driver have a Class III license but do not specify other requirements. Twenty systems include the state mandated training program (18 hours) for prospective drivers. Six systems require prospective drivers to have a minimum of six months or three months/3000 miles experience driving a bus. Ten systems have pre-certification requirements of two or more of the

following: skills validation, physical examination, driving record checks, or the other criteria listed above.

Seventy-four systems identified a minimum age requirement for school bus drivers. In 35 of these systems a driver must be at least 21 years of age. Thirty-three systems allow 18-year-olds to serve as school bus drivers. Drivers must be at least 22 years old in three systems and 25 years of age in two systems.

Maximum age for school bus drivers ranged from 55 to 65 in the 76 reporting systems. Sixty-eight of these systems allow a driver to continue to drive until age 65. Three systems require all drivers to be under the age of 60.

All drivers must have a completed physical examination form on file in 81 of the 82 systems responding. Twelve of these systems allow the driver to drive before the physical form is on file. The 69 remaining systems required the form to be on file before the drivers could drive.

Trainers

Driver training is usually conducted by local drivers (88% of responding systems), local administrative staff (87% of respondents), State Department of Education personnel (85%), or personnel of the Georgia State Patrol (77%).

Administrative Involvement

System administrative personnel meet with bus drivers in all 82 systems responding to this item, but in nine of those systems school administrators do not meet with drivers. System administrative personnel attend driver workshops in 73% of these systems; school administrative personnel attend driver workshops in only 31% of the respondent systems.

Driver physicals are conducted under either a group contract (33% of respondent systems) or contracts with individual drivers (57%). The driver may choose his/her own physician in 81% of these systems. Pay is withheld until the completed physical examination form is on file in 64% of the systems.

Safety Meetings

In 67% of the responding systems transportation safety meetings are conducted by local transportation directors. In the other

systems safety meetings are led by either Georgia Department of Education or Georgia State Patrol personnel. These meetings are held once a year (13% of respondent systems), twice yearly (28%), three times a year (25%), monthly (20%), or according to some other schedule. Twenty-two per cent of these systems withhold pay from drivers who do not attend safety meetings.

Trainers receive their training from the State Patrol (47% of those responding) or from local personnel (28%). Seven systems reported no minimum class size. For the other responding systems, classes for beginning bus drivers averaged five students. Eleven of these systems would conduct bus driver training sessions with as few as one student. Maximum class sizes for new driver training ranged from 3 to 40. Seven additional systems have no maximum class sizes. The average for those systems with a stated maximum was reported to be 17.

Thirty systems reported driver trainers received no remuneration for their services; training activities are considered part of the trainer's regular job. Reported hourly pay for trainers ranged from $3.35 to $10.05 and reported daily pay ranged from $10.00 to $100. One system reported a yearly fee of $500 paid to the driver trainer.

Attempts are made in 18 systems to match driver personality with bus-load characteristics. In seven of these the driver is assigned according to place of residence -- living in the community, riding a particular bus, or living near the beginning of a route. Other systems try to put a strong disciplinarian with "rougher" students or assign permanent drivers from frequently used successful substitutes. Systems may also switch drivers among various routes until a "good match" is found.

Driver Training Session Topics

Topics most frequently included in driver training sessions include bus care, safety checks on buses, driving skills and handling crisis situations. Among topics not included but which should be included as part of driver training according to the respondent systems, are child development, defusing explosive situations, interpersonal skills, and dealing with irate parents. See Table 2.

Table 2
Driver Training Session Topics

Topic	Included	Should be
Bus Care	79	1
Safety Check on Bus	78	2
Driving Skills	77	3
Child Development	35	31
Interpersonal Skills	56	19
Communication Skills	68	11
Handling Crisis Situations	72	6
Avoiding Adversarial Situations	64	12
Defusing Explosive Situations	55	20
Dealing with Irate Parents	59	18
Specificity in Describing Incidents	50	19
Building Positive Relationships with Route Area Residents	56	16

N = 84

Chapter 6

Rules and Regulations

Sixty-seven of the systems responding to the transportation survey reported utilization of a written manual for school bus drivers. This represented 81% of the respondent sample.

Major components of bus driver manuals include the following:

- Rules and regulations for students and drivers
- Student discipline procedures
- Loading and unloading procedures
- Bus care and maintenance procedures
- Safety and accident procedures

Fifty-five systems, or 71% of the respondents, conduct emergency situation drills. Written safety procedures are found in 85.5% of the systems. Only 81% of the systems reported inclusion of motor vehicle inspection reports.

Of the 80 systems describing procedures at a bus stop, 32, or 40%, allow the driver to blow the bus horn to notify students the bus is at the stop. Eighty-nine per cent of the respondents expect the student to be waiting at the bus stop. Ninety-four per cent of students board the bus at either their mailbox or their driveway. System transportation managers spot check drivers running the routes as scheduled in 98.6% of the systems responding to the survey. Students are required to be seated before the bus is set in motion in 91% of the respondent systems.

Tobacco use is restricted in 95% of the systems responding to the survey. Rules to this effect are distributed to students riding the buses and posted in many buses.

Drivers may take disciplinary action toward students who disobey transportation regulations by completing a bus conduct report which is filed at the student's school. The driver works with the designated school official to resolve student misbehavior problems in 85% of the systems responding to the survey. Parents are notified of student misconduct and the local board of education may become involved with very serious misconduct situations or habitual misconduct problems.

Chapter 7

Student Training

The experience of riding the school bus provides opportunity for teaching general safety. When students learn to obey instructions and signials from the driver, it contributes to their safety and that of others. Students who are taught to present orderly behavior in public, learn the values of self-discipline as well as building good will for the schools. Safety practices should not be left to chance. Students should be taught safety measures and the underlying reasons for them.

Transportation Rules

Seventy-eight per cent of systems responding to the transportation survey reported classroom discussion of transportation rules. Thirty-two per cent of the respondent systems reported student training at all grade levels. Eleven per cent reported training at each of grades one through eight and 11% reported student training at each of grades one through six. Twenty systems, or 24%, reported varying patterns of student training.

Fifty-two of the respondent systems, or 79%, conducted classroom discussion of transportation rules only in the fall of the year. Five systems reported student training throughout the year.

Sixty-seven systems, or 82% of the respondent sample, provide written rules and regulations for students. Fifteen of these systems require a parent signature indicating the parent has seen and understands the system rules for pupil transportation.

Safety Rules

Safety rules for pupil transportation are taught by the classroom teacher in 17 systems and by the driver or other school personnel in 57 systems. Instruction takes place in the classroom (26% of those systems providing transportation safety rules instruction), on the bus (7%), in assemblies (3%), in the classroom and on the bus (42%), in all three locations (14%), and in various other instructional situations (7%).

Student attitude toward bus drivers is rated as very positive in 7.9% of the responding systems and positive toward drivers in 65.8% of the responding systems. No systems reported a negative student attitude toward bus drivers.

Thirty-one per cent of the systems reported student regard of riding the bus as a privilege; 43% reported students considered riding the bus a student right. Thirty-six per cent of the respondents did not indicate student attitude toward bus riding.

Chapter 8

Student Code of Conduct

School bus drivers are trained to drive, but very few are provided training in behavior management. Effective management involves cooperation of the school personnel, parents, and students. Clear expectations presented in a brochure or pamphlet is one effective strategy for improving the behavior of students on the bus.

Monitoring Student Behavior

Student movement is minimized by student seating assignment in 18.6% of the systems responding to the survey and by driver disciplinary methods or other actions in the remaining systems. Student noise is minimized by driver monitoring in 91.4% of the respondent systems.

Students are regularly used as monitoring agents in only 5.7% of the respondent systems and are used periodically in 28.6% of the systems. The remaining 65.7% of the respondent systems never use students as monitoring agents. Of the respondent systems, or 2.9%, reported any use of video cameras as student monitoring agents.

Student seat belts are installed in all buses in only 11.5% of the systems responding to the questionnaire and are found in no buses in 48.7% of the respondent systems. Nine of the respondent systems require that student seat belts be installed on school buses.

Of the systems responding to this questionnaire, 71.6% have developed a written set of rules regarding transportation procedures and student codes of conduct and have distributed copies of these written rules to all transported students. In addition, 92.5% of the respondent systems post conduct rules for students on the school buses.

Discipline Problems

Drivers are given written procedures for handling discipline problems in 85% of the respondent systems. These include techniques for managing student behavior and techniques for handling problems. Written discipline notices given to students may be in either a checklist format (75% of the respondents) or a narrative format (29%). A number of systems have both checklist and narrative components in student discipline notices.

The principal is given a copy of the discipline notice in 71% of the respondent systems. Copies of the written discipline notice are sent to the parents by the driver, teacher, or school principal. Driver-parent conferences are utilized in 86% of the respondent systems; 99% utilize driver-principal conferences to help resolve student discipline problems.

Other Information

Systems were asked to identify the aspects of the student transportation program which generated the most complaints from parents or the school community. Student discipline was identified by more systems than was any other factor. Other primary concerns dealt with overcrowded buses, driver punctuality when picking up or delivering students, the need for shorter routes to reduce student time in transit, and parent complaints that the bus "doesn't stop for my child".

Transportation managers were asked to identify the aspects of the student transportation program they deemed most troublesome. The area generating the most concern for transportation managers was the identification and training of competent drivers. Other most troublesome areas include overall bus maintenance concerns, student discipline problems, parent complaints about drivers, and route scheduling.

Transportation directors in the majority of the systems (81%) are responsible for maintaining files for driver and student

policies, for documentation of driver training, and for maintaining driver manuals and driver evaluation records. The bus shop was identified as the location for the above named documents in 12% of the respondent systems.

Chapter 9

Implications for Staff Development

The goal of this study was to describe student transportation programs in Georgia and to identify common areas of concern and common characteristics of those programs. The data collected in this study could be used to produce a school transportation leadership development program.

The major finding of this project is that transportation programs operate in vastly different ways throughout the state but all experience similar problems and express similar concerns.

One common factor which seemed to reduce the number and severity of problems in transportation is the operation of a regularly scheduled, periodic, driver in-service program.

Driver Staff Development

An effective driver training program should include components designed to develop the minimum skills and knowledge needed by a driver and the advanced skills and knowledge needed by a proficient driver.

Topics which should be included in training sessions for drivers are:

- Role and responsibility of the school bus driver
- Local policies and procedures
- Driving fundamentals
- Bus maintenance and inspection

- Emergency driving techniques
- Crisis management
- Discipline strategies
- Child development
- Interpersonal skills
- Communication skills
- Developing self esteem
- Community reportori
- Safety
- First aid
- Transporting exceptional students

Transportation Leadership Staff Development

Components of a training program to develop effective transportation leadership personnel include the following:

- Role and responsibilities of transportation director
- Policies and procedures
- Interpersonal skills
- Communication skills
- Time management
- Stress management
- Conflict management
- Personnel evaluation
- Public relations
- Leadership skills
- Managerial skills
- Organizational skills
- Instructional techniques
- Discipline strategies
- Child development
- Management strategies

Chapter 10

Conclusion

Analysis of transportation programs throughout the state and study of the body of literature related to school transportation has led to recognition that *all* problems in a school transportation program can not be solved. It is, however, evident from this research that problems may be reduced both in number and severity when a comprehensive, on-going program of transportation personnel development is followed. Local systems must identify and implement components of a staff development program which best serve the needs of the local system and the local community.

Chapter 11

The Literature

Pupil transportation through the use of school buses in America is, according to Meadows, "a direct result of the desire and demand of the people in sparsely populated areas for their children to live at home and secure better educational facilities through consolidation of schools" (1940, p. 13). Featherston and Culp (1965) stated that pupil transportation grew in response to the "need to develop, in sparsely populated areas, educational centers with enough pupils to make it possible to meet the increasingly complex demands on the schools" (p. xi).

In 1938 a law was passed in Massachusetts allowing two or more contiguous school districts to establish a union school (Meadows, 1940). Pupil transportation to and from school began soon thereafter, with records of horse-drawn vehicles transporting students as easly as 1840.

Two developments during the last half of the nineteenth century began to create the need for pupil transportation at public expense. First, states decided it would be beneficial for the state if all children received some education. This led to compulsory attendance laws, and it naturally followed that states had to make attendance possible by either locating schools close to all children or by taking children to the schools. Second, the trend toward consolidation of school attendance centers necessitated the transport of students to these school centers (Featherstone & Culp, 1965).

Pupil transportation has been a responsibility of the public school since approximately 1870. The first state law which authorized use of public funds for pupil transportation was passed in Massachusetts in 1869. This was followed by a similar law passed in Vermont seven years later. Eighteen states had enacted transportation laws by 1900 (Featherstone & Culp, 1965). Georgia legalized pupil transportation in 1911, and by 1911 all 48 states had legalized pupil transportation at public expense.

Developments in rural education and overall expansion in public educational opportunities during the period 1915 to 1940 led to rapid expansion in the accompanying pupil transportation programs.

The widespread use of school buses has come about in the last four decades with this movement to abolish small inadequate school districts through consolidation into larger districts. To illustrate this point, one has only to recognize that in the early 1930's there were approximately 130,000 school districts in the United States. By 1978 there were fewer than 15,000 (Hersarling, 1983). The U. S. Department of Education reported that the schools of the United States had the second largest transportation system in the world. Approximately 40% of all the school-age children in the nation are transported to and from school by bus (Hersarling, 1983).

In 1941 Butterworth and Ruegsegger identified "a new area of service for the local (school) administrator -- that of pupil transportation" (p. vii). They readily recognized that "the transportation service brings with it many problems" (p. vii). A number of studies were undertaken during the late 1930's and early 1940's to identify the scope of the transportation program, to identify and explain various facets of the program, and to attempt to identify and give suggestions for avoiding problems and pitfalls accompanying pupil transportation.

As early as 1938 school transportation programs were recognized as "one of the chief problems of school administration (Lambert, 1938, p. vii). Butterworth and Ruegsegger declared in 1941 that administration of a pupil transportation program is both an art and a science. "It is an art *insofar* as the administrator in meeting his various problems depends upon general observation, analysis, and judgment. It is a science *insofar* as pertinent facts are carefully collected, sifted, and organized as a means of establishing principles of action and perfecting techniques for apply-

ing those principles to the development and execution of transportation policies" (1941, p. ix).

Lambert (1958) recognized that although transportation grows out of the main educational program, it is true that it also significantly shapes the main program. Pupil transportation is not only a result of social change, but also an instrument by which social and educational changes are accomplished. Meadows (1940) spoke to every school administrator when he stated "(to) all those interested in pupil transportation...the child's needs must come first" (Forward). Meadows further identified the two chief objectives of sound pupil transportation as being safety and economy.

To that end, promoting safety and economy in pupil transportation, the current study looks at the research available concerning overall management of the student transportation program. Special attention is paid to identified characteristics of good school bus drivers and training programs for bus drivers. Attention is also given to the needs and characteristics of students and to possible causes and ways to prevent and manage student discipline problems in the transportation program.

Management of the Student Transportation Program

Good management of pupil transportation is, according to Featherston and Culp (1965), the basic determinant of success in the program. Hersarling (1983) stressed that the school administrator responsible for the operation of the school transportation system should have a broad set of objectives that influence decisions made in the operation of the pupil transportation services. Featherston and Culp and Hersarling identified three general objectives which influence pupil transportation programs at both the local and state levels.

The first of these objectives is to make transportation as safe for the pupil as is consistent with reasonable cost. A second general objective is to render adequate transportation services. The third objective is to increase the efficiency of the program (Hersarling, 1983, p. 266).

Traditionally, there has been a lack in adequate understanding among school administrators of the necessity for administrative management of pupil transportation services. Featherston and Culp (1965) attributed this lack to the fact that pupil transportation originated not in professional school circles but grew out of

efforts of parents to send their children to schools not easily accessible to their homes.

The authors continued that neither the teacher nor the school administrator had any connection with transportation services during the years of transportation development. They considered their responsibility to be the teaching of students after they arrived at school and were not concerned with the problem of pupils living some distance from the school. Thus, pupil transportation acquired the classification of an "auxiliary service". Unfortunately, pupil transportation retains this classification in the minds of many school administrators.

One of the most important and continuing responsibilities of a state department of education "to promote the understanding among school officials and the general public that transportation is an integral part of the school program" (Featherston & Culp, 1965, p. 4). Other areas in which state departments of education must furnish leadership include keeping abreast of new developments in pupil transportation and passing this information along to local administrators, helping evaluate and improve provisions for state support of pupil transportation, studying and making recommendations regarding liability and insurance, promoting research and the sharing of information needed by the state legislature, administering those components of the pupil transportation program which require state approval, and furnishing local units of education with advisory services on the many technical problems involved in operating a transportation program.

To provide safe, economical transportation and adequate service to all eligible pupils is the primary responsibility of the school administration. Many individuals are involved in the operation of a pupil transportation program at the local level. Among these are the local board of education, the superintendent, the transportation supervisor or transportation director, the principal, the chief mechanic or maintenance foreman, other mechanics, the route supervisor, the dispatcher, and the driver.

Transportation personnel requirements are directly related to the size of the district and the method chosen for providing the service. In large districts roles may be very specialized, whereas in a small system one individual may serve several transportation roles. Regardless of district size or method of operation, the program requires the assignment of an administrator with supervisory responsibility over the transportation services.

Local Board of Education

The local board of education, in keeping with state laws and regulations, formulates the general policy for the operation of a pupil transportation system. "The role of this lay control body is to synthesize policies from all the lay and professional suggestions available and from directives contained in state statutes, regulations, and interpretations dealing with public education" (Featherston & Culp, 1965, p. 42). Through this continuing process of examination, re-examination, and policy determination, the board gives basic direction to the transportation service.

Superintendent

As the executive officer of the local board of education, the superintendent of schools has the responsibility of bringing to the board's attention existing problems with the transportation program and suggestions or recommendations for their solution. The superintendent must ensure that the school board and all school administrative officials are aware "of the integral function which the school bus service fills in education" (Featherston & Culp, 1965, p. 43). He must give local boards and administrative assistants basic orientation to proper transportation management. A second major function of the superintendent is the selection of capable leaders for the transportation program. If the superintendent selects capable leaders, then his function will be primarily to evaluate and present to the board recommendations from professional assistants regarding operation of the pupil transportation program and to bring back to these assistants the directives of the board.

Transportation Supervisor

As stated previously, one of the most important functions of the superintendent is the selection of personnel to coordinate the pupil transportation program. The transportation supervisor is chiefly responsible for the administration of pupil transportation. The person selected as transportation supervisor should possess the qualities desirable in any other administrator. The transportation supervisor must have the ability to work with people, the desire to support the school system, the capacity to work hard,

and the mentality to deal with complicated formulas and budgets (Hersarling, 1983).

Farmer (1985) defined the major responsibilities of the transportation supervisor as being that of translating board policies into a positive plan of action; supervision of program services (including program personnel, equipment maintenance, dissemination of information, etc); public relations; providing information to the local board of education and presenting the board with appropriate, timely requests; and preparation of written policies.

Featherston and Culp (1965) recommended that a transportation supervisor as a separate position, is probably warranted if a system operates a fleet of 25 or more buses. The transportation supervisor serves as the superintendent's assistant in charge of the school bus service. In this position he provides leadership for all personnel employed in bus service and is responsible for solving difficulties encountered in the daily operation of the transportation program. The transportation supervisor has the dual responsibility of recommending policy considerations to the superintendent and assuming direct responsibility for seeing that adopted policy is properly administered.

Of vital concern to the transportation supervisor, according to Featherston and Culp, are necessary measures to ensure safety in pupil transportation. The transportation supervisor is responsible for selecting drivers for recommendation to the board and for providing driver training and supervision. He is responsible for overseeing bus and supply purchasing and for overall equipment maintenance. The transportation supervisor is responsible for keeping or monitoring all required records. He compiles, interprets, and presents information to the board regarding bus routes and stops. In addition to providing driver training, the transportation supervisor promotes programs to train pupils for school bus riding and to show principals and teachers the need for their positive contribution to the transportation program. The transportation supervisor is also responsible for supplying the superintendent with adequate information upon which to advise the board of education on policy matters and in matters of public relations. Coordination of schedules, planning for the health and safety of pupils being transported, and resolving conflicts among students, parents and drivers are all functions of the transportation supervisor.

Hersarling (1983) declared that in any well organized school district, each position within the district which has supervisory

responsibilities will have a comprehensive job description. He provided a sample of a job description for a middle-sized school district which owns and maintains its own fleet of buses. This job description, from College Station Independent School District, Texas, is found in Appendix A (Hersarling, 1983).

Principal

The school principal serves as the representative of the board of education in a designated school. As such, he is a key figure in pupil transportation. The principal's most important job is to "harmonize the bus service with the general school program" (Featherston & Culp, 1965, p. 44). The principal must take the transportation program into account as he plans the various managerial aspects of school operation. He is responsible for administering transportation policies and often serves as a key figure when student disciplinary action is needed. The principal must know the drivers who operate buses serving his school and should make drivers feel themselves to be welcome additions to the school staff.

The principal must plan and supervise specific procedures for operating buses on the school grounds. Among the principal's considertions are provisions for pupil supervision during bus loading and unloading, separation of bus and other campus traffic, training of pupils for bus riding, and the proper accounting of transported pupils.

Chief Mechanic

The chief mechanic, or maintenance foreman is essential to good operation of pupil transportation services. He has responsibility for seeing that bus equipment is safe for operation. Through proper bus maintenance, the chief mechanic contributes not only to pupil safety, but also to economical operation of the bus fleet. Through regular inspections the chief mechanic identifies the service needs of buses before these contribute to problems in bus operation. Other responsibilities of the maintenance foreman include supervision of shop mechanics, management of the shop and service equipment, and cooperation with the transportation supervisor and other administrators.

Mechanics

Bus mechanics operate under the direction of the chief mechanic, or maintenance foreman. For proper bus operation, Featherston and Culp (1965) recommended a thorough bus check by a mechanic every 1000 miles or 30 days, whichever comes first. In addition to performing routine maintenance and needed repairs, garage mechanics should maintain a garage service record on each vehicle. (These reports are then summarized by the maintenance foreman for the district monthly bus report.)

The prospective bus mechanic should have a good background in automotive repair and care, with experience with buses and trucks preferable. Because the mechanic performs the routine maintenance and repairs essential to safe, efficient operation of the bus fleet, he should have unflagging curiosity about motor vehicles so that he will not rely on routine observations and he should have a zeal for doing things right. Featherston and Culp said a bus mechanic "should be a craftsman with pride in his work" (1965, p. 78).

Bus mechanics should be oriented toward preventing mechanical trouble rather than repairing difficulties after they have become critical or have disabled the bus. Bus mechanics should be trained for vigorous observation to identify small needs on the bus rather than waiting for a call to come in about a bus which no longer runs. The role of the successful bus mechanic should include searching for lubrication and adjustment needs which may serve to forestall trouble, not just the replacement of parts to restore a vehicle to operation.

Route Supervisor

Employment of a route supervisor is usually restricted to those systems with 100 or more buses in operation (Farmer, 1975). The route supervisor reports directly to the transportation supervisor. Like the transportation director, the route supervisor's major concerns include safety and program efficiency. The route supervisor should be proficient in planning route adjustments, locating school bus stops, and ensuring that drivers comply with established time schedules. A number of school systems are now utilizing computerized routing, such as the STAR system to make the route supervisor's job more manageable ("Bus Routing Simplified..., 1986). The route supervisor also has responsibility

for supervision of school bus drivers and investigation of school bus accidents and public complaints.

Dispatcher

The dispatcher, like the route supervisor, is usually employed in school systems operating a fleet of at least 100 buses. The dispatcher coordinates the securing of substitute drivers to keep delays in transportation service to an absolute minimum. Another important responsibility is the diverting of service trucks to regular route buses having mechanical difficulty.

Dispatchers in Franklin County, Ohio ("Simon Says," 1986) and Toronto, Canada ("Computerizing Door-to-Door Service, 1986), also assist administrators in knowing which pupils are on the bus and why the child may not be riding on a given day.

Driver

Farmer (1975) declared that "the success of the pupil transportation program is more dependent upon the school bus driver than any other factor involved in providing pupil transportation services" (p. 105). Because of the importance of the driver's role in pupil transportation, this report is giving special emphasis to characteristics of good drivers, recruitment of bus drivers, driver training, compensation for drivers, responsibilities, and rules and regulations for school bus drivers.

School Bus Drivers

The driver is recognized by most educators as the most important individual in the transportation program. According to Featherston and Culp (1965), it is the driver who finally determines the success of the operation and who, more than anyone else, controls the safety and efficiency of each bus.

In 1941 Butterworth and Ruegsegger recognized that "excellent vehicles and careful planning of routes will not insure high quality of service unless highly competent drivers are employed" (p. 34). Meadows (1940) further stressed the importance of high quality school bus drivers as he outlined the driver's responsibilities. Meadows stated,

> The bus driver is expected to deliver his bus load of pupils safely and on time each bus trip. He is usually held responsible for discipline on the bus. He has to safeguard imma-

> ture pupils and at the same time control adolescent pupils (p. 115).

The bus driver also serves as a public relations agent for the school system. The driver usually lives in the community where many of the pupils he transports live. His contacts with parents make the driver influential in molding parental opinion of schools. Because the driver is often questioned by parents, he is in a strategic position to disseminate worthwhile information relative to the operation of the school system. As Helen Johnson, driver trainer in the Seattle, Washington, schools stated, "The school bus driver is sort of the front line emissary of the school district. Parents might not know the principal, but they recognize the driver" (Thomas, 1984, p. 3).

Because of the driver's critical role in the safety, adequacy, and efficiency of the pupil transportation program, it is imperative that the best possible drivers be recruited, that beginning and veteran drivers be thoroughly trained in all aspects of pupil transportation, and that a continuous program of adequate driver supervision be maintained.

Characteristics of Good Drivers

In 1975 Farmer identified three factors that exert "a profound influence" upon the quality of transportation program service. These factors are:

> 1) procedures utilized in the selection of driver personnel, 2) adequacy of supervisory practices, and 3) availability of driver training services. (p. 103)

Among the basic qualifications needed by the bus driver applicant, Farmer identified that the applicant must be:

> 1) capable and responsible, 2) free from physical defects, 3) of good moral character, 4) superior to the average driver, 5) a tactful disciplinarian, and 6) within prescribed age limits. (pp. 104-105)

Butterworth and Ruegsegger (1941) identified 21 as being generally accepted as a standard minimum age. This minimum age is generally accepted today, as well. They also recognized necessary driver qualifications related to age, character, habits, physical condition, previous experience, and educational attainments. Meadows (1940) emphasized the character and habits of drivers. Drivers, according to Meadows, should be of good moral character. They should be able to get along well with pupils of varying dispositions. Drivers should have a positive attitude

toward work, including adapting quickly to new situations and looking for opportunities to improve service. Meadows stated drivers should be clean and neat in personal appearance. A driver's voice should be pleasing and "of sufficient volume to be heard distinctly outside the bus while the motor is running". The driver should not use profane or indecent language and should not use liquor, tobacco or drugs on the job (Meadows, 1940, pp. 136-137).

Farmer (1985) also stressed that successful driver applicants should be in good physical condition and be of good character. He further emphasized the need for the applicant to be "skilled in the operation of bus-type equipment, and able to communicate with people. They must demonstrate a positive attitude, be of good temperament, and always willing to place the welfare of the transported pupil above their own personal consideration" (p. 11). Farmer declared that the health of the school bus driver is as important as any of his motor skills. Vision (including visual acuity, field of vision, and color vision), night vision, depth perception, hearing, and reaction time are identified as areas of particular concern. Other important traits, according to Farmer, are the applicant's mental and emotion qualities (including positive attitude, a pleasing personality, better than average emotional stability, calmness under stress, coolness during emergencies, even temperament, alertness, fairness, honesty and patience, personal hygiene and good grooming. Both Farmer and Thomas (1984) stressed the importance of the driver really liking children and being of impeccable character.

Hersarling (1983) suggested three additional qualifications for potential school bus drivers. Driver applicants should have the ability to earn the confidence of parents whose children ride the bus. A bus driver should have personal pride in the appearance of his bus. Drivers should have the willingness to participate in driver training programs.

Driver Recruitment

Driver recruitment is a problem area. This problem is compounded by the fact that driving is most often a part-time job and carries the stigma of being "menial labor". Thus bus driving is not very attractive to able, ambitious people except when the driving can be fitted into the work schedules in other areas. Recruitment of females is increasing for at least two reasons: females are often looking for part-time work and the female bus driver can often

find other work within the school system in the cafeteria or as a teacher aide or clerical aide. Driving can also be combined reasonable well with other employment in the school or bus maintenance program.

Maintaining a large pool of qualified, well-trained substitute drivers also aids in the recruitment of full-time drivers from these ranks. The substitute pool can serve as a "testing ground" or a "holding" mechanism for drivers until full-time positions are available.

Driver Training

Farmer declared in 1975 that meeting the training needs of school bus drivers is more closely related to driver performance than are any of the other factors influencing the quality of pupil transportation service. The importance of thorough training for both regular and substitute drivers is stressed by the majority of pupil transportation researchers.

Featherston and Culp charged state departments of education with the responsibility of seeing that safe, competent drivers are utilized in pupil transportation programs. They identified two areas of primary state education agency responsibility: "1) training school officials in the importance of and technical requirements for safe school bus driving, and 2) providing for the licensing of adequately trained, competent drivers" (1965, p. 39). According to these researchers, in some states the state department of education issues a special school bus driver's license in addition to the regular license issued by the motor vehicle department.

Featherston and Culp (1965) outlined a driver training program which includes the role of bus operation in the total education program, the role of the bus driver as a school employee, basic safety rules of bus operation, inspection and care of the bus, and good safety and education practices in dealing with pupil passengers. In 1965, for those states that had specific driver training programs, the length of driver training varied from one-half day in Idaho to 10 days in New York.

In 1984 the Oregon State Department of Education outlined a driver training program to earn the school bus driver's license issued by that body. This training program includes 10 hours of classroom training in the bus driver's core course and a minimum of 10 hours behind-the-wheel training conducted by a trainer certified by the Oregon Department of Education. The core course

includes four two-and-a-half hour units of study in the areas of 1) qualifications, responsibilities, and regulations; 2) pupil management; 3) inspections and operation; and 4) emergency and accident procedures (Oregon School Bus Drivers Training Program: Core Course Student Handbook, 1985). The hours of behind-the-wheel training are spent in actual operation of the vehicle or vehicles the applicant will be expected to drive (Oregon Pupil Transportation Manual, 1984).

Several other states provide extensive guidelines regulating bus driver training so as to ensure consistency in the scope and minimum depth of training throughout the state. The Illinois driver training program includes classroom instruction in the areas of role and responsibility of the school bus driver, passenger control, first aid, driving fundamentals, handling accidents and emergencies, and detecting hazards. A driving component is also included in Illinois State Board of Education training for school bus drivers (Illinois School Bus Driver Instructional Program, 1980).

Many local school systems also provide extensive guidelines regulating the training of school bus drivers. Two noteworthy examples are the programs provided by the Metro Nashville (Tennessee) Public Schools and the Toms River (New Jersey) Regional Schools.

The Nashville Public Schools, like the majority of programs reviewed, provide training for veteran drivers as well as potential new drivers. Nashville's continuous training program is designed "to prepare drivers for both duty and disaster" (Better Training", 1983, p. 28). The initial program is a 14-day driver training course used to ensure driver competency. Periodic progress checks are made over the next six months. There are six components to the Nashville driver training program:

- Training films, reviewing the transportation manuals and policies of the transportation department.
- Inspection of buses to learn procedures for checking fuel, water, oil, and the pressure and condition and to learn about emergency equipment. Later, trainees drive an empty 84 passenger bus to learn about shift patterns and bus clearance.
- Behind-the-wheel training on a practice driving range.
- Additional practice driving and testing over the Tennessee Driving Manual. Also included is the

National Safety Council Defensive Driving Course -- eight hours of training for inclement weather driving, state school bus laws, behind-the-wheel techniques, general driving techniques, first aid, and dealing with different types of accidents.

- Trainees are taken to the Tennessee Highway Patrol Office to qualify for a special chauffeur's license.
- Testing over material covered in the local course and the NSC Defensive Driving Course.

The Toms River (New Jersey) Driver's Manual 1984-1985 further elaborates driver information and procedures. The initial and follow up driver training activities are similar to those in the Nashville schools.

Turner (1981), with the National Academy for Police Driving, has compiled a manual for training school bus drivers. Specific topics of this manual include routine safety checks, effective body positioning, elements that will be encountered (natural and induced), the "rolling circus syndrome" (combined total of student voices, movements, and actions), stress, bus security, physical laws affecting school bus operations, driving techniques, defensive driving, reading the road, skid correction, use of mirrors, backing and parking, accident avoidance and crash procedures, and ultimate responsibility to the students.

Although a number of the driver training programs examined were much more extensive that the typical 18-hour training program in Georgia, some programs were not as thorough as the typical program followed in Georgia. Most programs were similar to that followed by Georgia school systems in that they include classroom, driving without students, and supervised driving with students components.

Making program leaders vary from state to state. In some states the trainers must be certified as such by the state board of education. Other states use veteran drivers, professional trainers, or external agents to provide training for school bus drivers.

Compensation

Little data are available in the recent literature regarding driver compensation. A general concern appears to be the low pay (partially due to the part-time nature of the job) is a contributing factor to the difficulty of attracting and keeping highly qualified, motivated drivers.

Responsibilities

Responsibility is a key ingredient for a successful pupil transportation program. Responsibility is bidirectional -- there are responsibilities that must be accepted by the driver and responsibilities of the district to drivers.

Featherston and Culp (1965) believed that placing responsibility where it belongs is perhaps the most important step in assigning a bus driver. They direct the transportation supervisor to "see that the driver is properly charged with, accepts, and understands his responsibility for the safe operation of his bus" (p. 76).

Meadows (1940) saw the area of economy as being an important driver responsibility. He and a number of other researchers recognized that the bus driver has much to do with the economy of school bus operation. The driver affects cost of operation both through his care of the bus itself and through his driving style.

Among the responsibilities of the driver to the school identified by Butterworth and Ruegsegger (1941) are punctuality and regularity; at all times reflecting credit on the school system through his behavior; loyalty; confidentiality and professional attitude; conscientious care of his bus -- including operation, mechanical, and cleanliness aspects; and efforts to look for opportunities to improve bus service. And "above all he should develop a safety consciousness" (pp. 40-41).

District responsibilities to drivers include efforts to provide salary consistent with the cost of living, qualifications of the driver, and service rendered; security of position; insurance protecting the driver from liability; efforts to stimulate driver growth and to encourage the driver to improve in service; and regularly scheduled meetings and training sessions (Butterworth & Ruegsegger, 1941).

Farmer (1975) viewed supervision of drivers as a district responsibility to drivers. He stressed that disciplinary action should be fair and impartial. Districts should ensure that drivers understand processes and procedures and should maintain accurate, complete personnel records. Farmer also stressed the importance of regularly scheduled conferences between the transportation supervisor and individual drivers.

Rules and Regulations

Consistent with district responsibilities to drivers and driver responsibilities to districts is the need for clear communication of transportation processes and procedures and the rules govern-

ing both driver actions and the overall transportation program. The most effective way to guarantee all drivers are aware of these rules, regulations, processes and procedures is through their incorporation into a bus driver handbook.

Students

The driver's first responsibility is for the safety of the pupils he transports. In order to provide safe transportation, the driver must be aware of student needs, student characteristics, and must be able to maintain good student discipline. One author has described a bus driver as a special individual who can keep track of the equivalent of two classrooms of kids of mixed ages while driving a 36-foot bus through heavy traffic in all kinds of weather conditions. To do this takes a love for and an understanding of students.

Student Needs

Students who use school transportation spend considerable amounts of time, varying from a few minutes to over two hours a day, riding school buses. This time involves learning activity of an informal nature. Students need to recognize this transportation time as an extension of the regular school day. Learning experiences on the school bus can be good or bad, desirable or undesirable. They can set the tone for the child's day at school or for the parent's perception of the school experience. The driver thus serves as a "teacher on wheels" and a roving public relations agent.

Students need to have confidence in and respect for their bus driver. They need to be able to count on the driver to follow the assigned schedule, to be punctual without fail. Students need to be treated fairly, to be treated equally and in a friendly manner. Students need to be treated impartially and firmly, but not unduly strictly, as the driver maintains discipline on the bus.

Students need to have a bus driver who is courteous, considerate, cooperative and protective. Students need a cheerful driver who is able to maintain good control of his riders. Students need a driver they can trust. Students need a driver who sets a good example for them.

Discipline

Hersarling (1983), Featherston and Culp (1965), Noble (1940), Farmer (1975; 1985), and others agree that many concerns of parents regarding pupil transportation would be allevated if they felt that children were well-supervised while riding the bus. Student discipline is one means by which the school bus driver gains the confidence of those parents whose children he transports.

Discipline on the bus requires an established district policy with regards to guidelines for transported pupil behavior and consequences of discipline problems. Maintaining good student discipline on school buses is a cooperative effort involving bus drivers, school administrators, and parents.

A number of authors observed that few school services can give more emphasis to the necessity for self-discipline and regularity than the school bus. Students are expected to be ready to board the bus at a scheduled time, thereby learning the value of correct time. Riding the school bus is seen as valuable for building a spirit of cooperation and for learning courtesy, good manners, and consideration for other people. The promotion of peer judgment and group interaction and group discussion of common problems are viewed as benefits of riding the school bus. On the bus the student is made aware of the needs for and rewards of cleanliness. School transportation may prove valuable for teaching general safety and giving students opportunities to observe good driving practices.

Unfortunately, the lofty ideals stated above often do not materialize in the day-to-day workings of pupil transportation. The bus itself influences group interactions. Children are in much closer physical contact on the bus than they are in the classroom. This closer proximity may lead to claustrophobia feelings and to more prevalent pushing, shoving, and physical play on the bus than in the classroom. Also, the lack of organized activity on the school bus, as contrasted to the classroom, creates an atmosphere in which children are much more likely to become generally active and boisterous (Featherston & Culp, 1965).

Featherston and Culp also recognized that pupil conduct on the bus inevitably influences activities within the classroom and vice versa. On the morning ride the feelings and attitudes of students are molded by the "fresh enthusiasm of the morning" (p. 28) and aspects of their home lives. Student reactions to the day's school experiences are the primary determinants of the group's behavior on the homeward trip. The group's behavior is often influenced

greatly by the behavior of a few students because the transfer of motive and mood is encouraged by close association. Overcrowdedness adds to the problems of group association.

Various surveys have determined that it is the junior high grades at which pupil misbehavior on school buses is most likely to occur. Upper elementary and senior high age students are also more likely to misbehave on school buses than are primary age children (Novle, 1940). Student misbehavior is more likely to occur on the afternoon trip than on the morning trip and more likely on special trips than on regular trips.

Controlling and Preventing Student Misbehavior

Novle (1940) found that most superintendents favor an assigned seating plan as one means of controlling and preventing student misbehavior. Patterns of assigned seat arrangement vary. Among Noble's suggestions for eliminating misbehavior are the following:

1) A program of planned instruction for students and supervision of transported students.

2) Promoting "safe and socially correct" patterns of behavior among students.

3) Local system responsibility to enforce and modify a state-outlined program of instruction and supervision for transported students.

4) A program of driver instruction including possible types of misbehavior, the influence of sex differences, the relative number of types of problems occurring at various grade levels, problems resulting from different methods of operation, differences between morning and afternoon trips, and the differences between regular and special trips.

Featherston and Culp (1965) also recognized the importance of training pupils to ride buses. Students must be led to understand what constitutes acceptable behavior in the crowded environment of the school bus. They also recognized that "overcrowding, long riding distances, and poor bus equipment contribute to behavior problems" (p. 80).

Students must be made aware of the reasons for proper conduct on buses. They must be made aware that the closeness of contact on buses tends to exacerbate perceived problems. Students must be made to recognize that on the school bus the driver is in charge.

Fostering these awarenesses in transported pupils is a responsibility shared jointly by the school bus driver and the classroom

teacher. Transportation procedures should be discussed with the student both in the bus and in the classroom. Bus drivers may meet with groups of students to assist with classroom training for safe pupil transportation. Student training materials such as the *A Safe Ride to School; A Safe Ride Home* (Illinois State Board of Education, 1980) and the *I Pledge: School Bus Safety Coloring Book* distributed by the Georgia State Patrol (1979) stress basic safety rules, courtesy, boarding and leaving the bus, and punctuality. Emergency procedures are also covered.

Noble surveyed 294 rural superintendents in 1940 and found that school buses are the second most likely scene of student disciplinary problems. Other areas ranked included playgrounds first, hallways third, bathrooms fourth, and classrooms fifth. This led to his conclusion that misbehavior is less likely to occur when pupils are directly under the supervision of the teacher. Therefore, the implication exists that while the bus is in route, the bus driver must maintain the same type of influence over the pupils he transports as the teacher exercises in the classroom. Modern recognition of this implication may explain the growing popularity of involving bus drivers in in-service programs designed to train them in the same type discipline strategies as those being used in the classroom. For example, many schools utilizing Lee Cantor's *Assertive Discipline* program in the classrooms are turning to the companion *Assertive Discipline for Bus Drivers* (1987) to promote better discipline in the transportation program. Similarity in strategies and consistency in expectations of student behavior strengthen the promotion of good student discipline.

Conclusion

In 1965 Featherston and Culp stated "it is obvious by now that pupil transportation is becoming and will remain one of the two or three major services of the public schools" (p. 143). These authors recognized several reasons, based on current trends, "for believing that the growth of transportation may continue for many years to be disproportionately higher than the growth in enrollment" (p. 143).

This observation has been validated by data gathered from the National Association of State Directors of Pupil Transportation Services (NASDPTS) and published in School Bus Fleet's Annual Fact Book (December/January 1988). According to NASDPTS, in the United States in 1985-86 (the most recent year

for which data are available) 21,945,021 pupils were transported 3,348,663,903 miles on 338,854 buses at a total cost of $6,285,209,795. The average bus load was 64.8 pupils per vehicle and the average annual expenditure was $286.40 per pupil. See Table 3.

The strength of this growth is readily evident when one views the same national statistics for the fifteen previous years. In 1970-71 a total of 19,191,483 pupils were transported on 239,973 vehicles at a total cost of $1,178,910,190. An average of 78.1 pupils were assigned per vehicle and the average annual expenditure was $61.82 per pupil. See Table 3.

Statistics available for Georgia during the 1985-86 school year reveal that Georgia has fewer buses per student than the national average and spends only five per cent of the national average per pupil expenditure. Georgia has an average of 83.4 pupils per vehicle and an average expenditure of $16.36 per pupil.

Table 3
Pupil Transportation Statistics

	1970-1971 National	1985-1986 National	1985-1986 Georgia
#of pupils	19,191,483	21,945,021	836,117
#of buses	239,973	338,854	10,028
# of miles	*	3,348,663,903	90,249,840
Total cost($)	1,178,910,190	6,285,209,795	136,746,382
Pupils/vehicle	78.1	64.8	83.4
$/pupil	$61.82	$286.40	$16.36

* Information not available

Growth in the pupil transportation program and growth in the importance of the pupil transportation program is nothing new. Lambert's observation is as apt today as it was when he made the statement in 1938: "Transportation of pupils as an important aspect of modern education is here to stay. The present task is to grasp its significance, to direct its service, and so to manage it that social and educational progress will be made while the safety and comfort of transported pupils are guaranteed" (p. 120). Such is also the task of the current school transportation program administrator.

Appendix A

Duties and Responsibilities of the Transportation Director:

The Director of Transportation is responsible to the Assistant Superintendent for Finance and Business Affairs for the maintenance of motor vehicles owned by the school district and the operation of the Pupil Transportation System. Specific duties and responsibilities include the following:

I. Determine bus rider eligibility for each school campus.

A. Measure the distance from a specified point by driving to the two mile limit.

B. Mark the two-mile limits on a map and supply each school with such a map.

II. Establish bus routes where and when needed.

A. Designate each route on a map and supply each school with such a map of each route. Maintain a written description of each route.

B. Approve any route changes if or when they are needed.

C. Maintain a rider list for each route, designating the eligible and ineligible riders. Revise this list monthly and provide a copy to the schools and the driver of the route.

III. Assign buses and drivers to routes and designate which bus each student will ride. Answer inquiries and complaints from school personnel and parents.

IV. Apply to the T.E.A. for approval of new routes or significant changes in previously approved routes.

V. Prepare the annual T.E.A. transportation report.

A. Approved route number.

B. Distance traveled on each route.

C. Number of miles of surfaced and unsurfaced roads on each route.

D. Model and rated capacity of the buses assigned to each route.

E. The total number of eligible students transported on each approved route.

F. The largest number of eligible students transported on the bus at one time.

VI. Recruit, hire, train and supervise bus drivers.

VII. Maintain records on all drivers to insure that they meet all legal requirements: (1) Chauffeur license; (2) Department of Public Safety (DPS) driving record. Obtain this information on each driver from DPS; (3) Signed agreement between driver and school; (4) Maintain record of driver participation in training as established by T.E.A.; (5) Physical examination; (6) T.B. test.

VIII. Provide each driver with a copy of the "Handbook for School Transportation Personnel". Revise and reprint each summer.

IX. Approve the use of and assign school buses for extra and co-curricular trips.

A. Receive requests for trips.

B. Fill out a dispatch form for each trip.

1. secure driver(s) and assign buses
2. record driver's time
3. record distance traveled
4. record gasoline and oil used and cost
5. certify payment to driver
6. compute bus cost

C. Fill out a confirmation and driver information form for each trip.

1. driver, date and bus number
2. destination, person in charge and departure time and place
3. route to travel and service points

X. Supervise the maintenance and service of all school vehicles.

A. Establish and supervise service maintenance procedures.

1. maintain individual service records on all vehicles

2. maintain individual maintenance records on all vehicles

B. Make periodic reports to business office.

1. cost of maintaining vehicles'

2. cost of operating vehicles

3. cost of gasoline and oil used for travel other than pupil transportation

4. assignment budget codes

XI. Initiate purchases made through the State Board of Control.

A. Tires, tubes, batteries

B. Tire recapping

C. School buses

XII. Determine the need for the purchase of replacement or additional new buses. Make recommendations to the Assistant Superintendent for Finance.

XIII. Determine the cost of transporting non-eligible students. Make recommendations to the Assistant Superintendent for Finance.

XIV. Investigate all bus accidents and make a written report to the Assistant Superintendent for Finance.

XV. Design, print and maintain an adequate supply of forms.

XVI. Carry out any other responsibilities as assigned by the Assistant Superintendent for Finance.

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